

Amendments to the Drawings:

The drawing sheets attached in connection with the above-identified application containing Figures 3 and 5 are being presented as new formal drawing sheets to be substituted for the previously submitted drawing sheet or sheets. The drawing Figures 3 and 5 have been amended. Appended to this amendment is an annotated copy of the previous drawing sheet which has been marked to show changes presented in the replacement sheet of the drawing.

The specific changes which have been made to Figure 3 and 5 are to remove the unlabeled brackets supporting elements 104 and 106 and to conform the height of the flow channels 124 and 140 to the thickness of heat sink 104.

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claim 29 is currently being amended.

Figures 3 and 5 have been amended to remove the unlabeled brackets supporting elements 104 and 106 and to conform the height of the flow channels 124 and 140 to the thickness of heat sink 104.

After amending the claims as set forth above, claims 1-9 and 11-30 remain pending in this application.

Interview

Applicants appreciate the courtesies extended to their representative during an interview conducted on April 17, 2007. During the interview, the rejections of the claims under 35 U.S.C. § 112, ¶ 1 and under 35 U.S.C. § 103(a) were discussed in view of the Amendment accompanying the Request for Continued Examination filed on February 16, 2007.

Claim Rejections - 35 U.S.C. § 112

On page 2 of the Office Action, claims 6-11 and 27-30 were again rejected under 35 U.S.C. § 112, ¶ 1, as failing to comply with the enablement requirement. In particular, it was asserted that the claims contain subject matter not described in the specification to enable one skilled in the art.

1. Monolithic

The term “monolithic” is used in only one claim, dependent claim 28, which recites that the “fluid-cooled heat sink has a monolithic design.” This recitation of claim 28 is consistent with the description in the specification of the present application that element 104 is a liquid-cooled heat sink having a monolithic structure (see, e.g., ¶ [0033], lines 1-3). In fact, element 104 is consistently referred to throughout the description as having a monolithic structure (see ¶¶ [0033-0036]).

The specification also states that the inventive temperature control device “includes a miniature liquid-cooled heat sink with monolithic structure.” ¶ [0031], lines 8-9. The

specification further states that the “monolithic design is one piece and increases the thermal conductivity by eliminating brazing joints due to differential expansion.” ¶ [0031], lines 9-11. Accordingly, the specification and claims both limit the monolithic design to the heat sink, and not any other element, and also provide a description of the meaning of a monolithic design. Applicants therefore submit that the term “monolithic” is clear and one skilled in the art would be enabled to make and use a testing system having a heat sink with a monolithic design.

2. Structure in Figs. 3-7

Figs. 3 and 5 both include unlabeled brackets shown as supporting elements 106 (the cover) and 104 (the heat sink). In Figs. 4, 6, and 7, however, these unlabeled brackets are not shown, and thus the brackets do not interfere with the assembly and sealing of the device 100. More important, there is no description of these brackets anywhere in the specification of the present application.

By this Amendment, Applicants have amended Figs. 3 and 5 to remove the brackets, which are neither labeled in the figures nor described in the specification, from elements 106 and 104. Applicants submit that these amendments are supported by the specification and by the arrangements shown in Figs. 4, 6, and 7, and therefore submit that these amendments to Figs. 3 and 5 do not constitute new matter.

3. Part 158

Part 158 actually refers to a side of the heat sink 104, not the flow channels. Rather, as shown in Fig. 5 and described in ¶¶ [0035-0036], the flow channels correspond to first flow channels 126 and second flow channels 140.

By this Amendment, Applicants have amended Figs. 3 and 5 to make clear that the flow channels 126, 140 do not interfere with the assembly and sealing of the device 100. Applicants submit that these amendments are supported by the specification and by the arrangements shown in Figs. 4, 6, and 7, and therefore submit that these amendments to Figs. 3 and 5 do not constitute new matter.

4. Operation and Structure of Heat Sink

In the specification, ¶¶ [0033-0037] provide a very detailed and clear explanation of the operation and structure of the heat sink 104 including how liquid traverses the various

openings, outlets, passages and flow channels of the device 100. Applicants submit that this description clearly enables one skilled in the art to make and use the heat sink.

5. Conclusion

In view of the above remarks and amendments to the figures, Applicants submit that all of the claims are enabled and in conformance with 35 U.S.C. § 112, ¶ 1. Applicants therefore request that the rejection of claims under 35 U.S.C. § 112, ¶ 1, be withdrawn.


Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date: August 27, 2007

By  _____

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INVENTOR: Samer KABBANI et al.
SERIAL NO.: 10/758,209
ATTORNEY DOCKET NO.: 047589-0167

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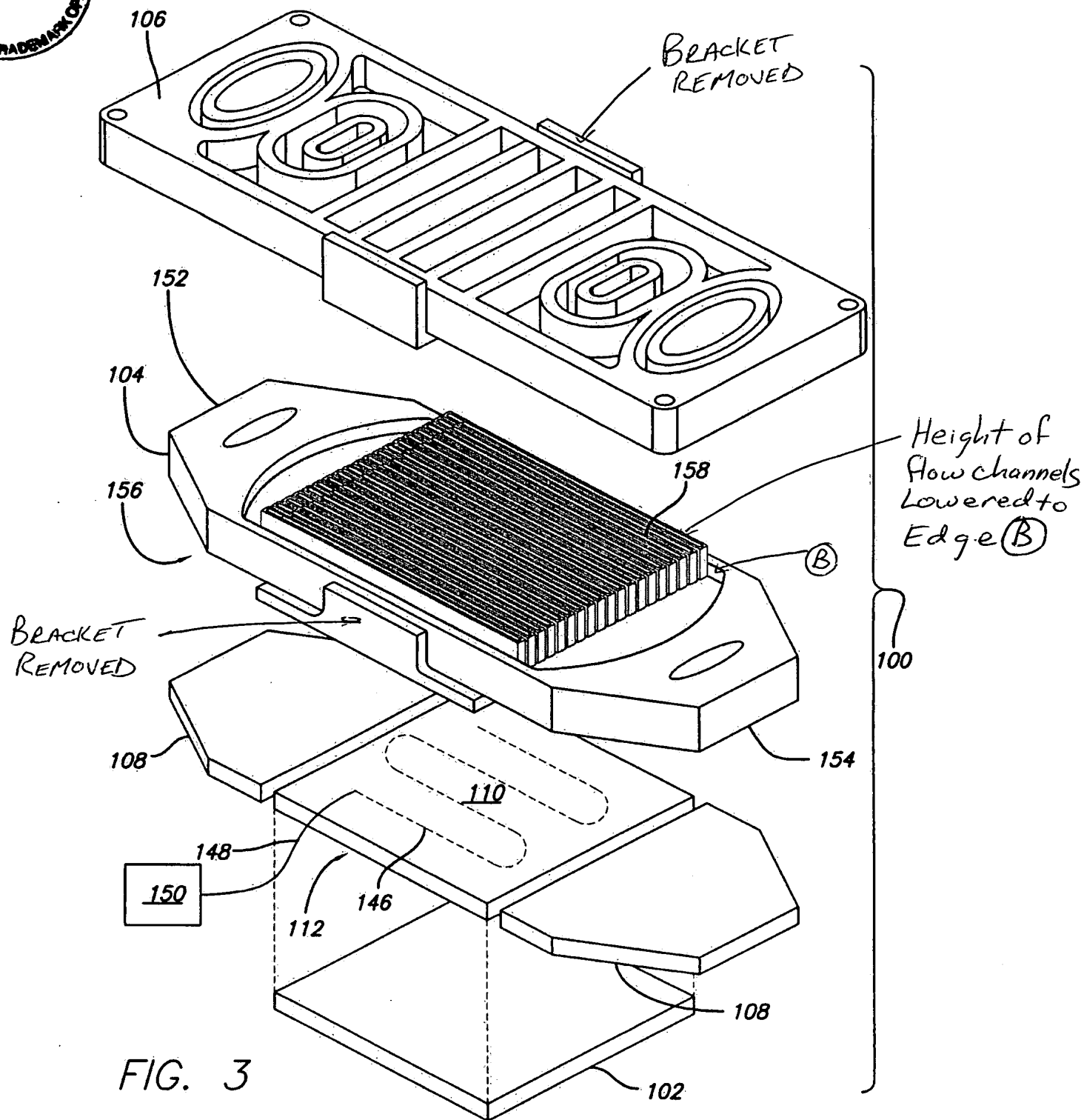


FIG. 3

TITLE: ACTIVE THERMAL CONTROL SYSTEM WITH MINIATURE
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